PacifiCorp may keep Klamath dams

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The long saga of fish, farms and power along the Klamath River continues as PacifiCorp changed direction and announced Feb. 7 that it is considering implementing fish ladders on four hydroelectric dams as part of a 50 year relicensing process.

After saying last year that it was going to take down the Klamath dams, PacifiCorp cited two main reasons for keeping them: the benefits of clean hydroelectricity and the cost of removal, including dealing with the sediment behind the dams.

Proponents of removing the dams say the sediment can be dealt with and that the small amount of power generated by the dams is not worth the damage to the fisheries.

The Klamath Irrigation Project, begun in the early 1900s in California and Oregon, has built canals, water diversions and dams to provide irrigation for farmers and hydroelectric power. Fishermen and farmers have been attempting for years to work out a compromise that will sustain both interests. Scientific opinions on the causes of declining fish populations are often in opposition.

Over the last six years, the Klamath River has seen water cut off to farmers to save fish and water diverted back to farmers that fishermen claim killed upwards of 30,000 fish. Due to falling numbers of salmon, fishing was severely restricted along sections of California and Oregon coastlines last year, causing a state of economic emergency to be declared in communities that rely on fishing for their economic viability.

Concerns over declining numbers of salmon has caused the Department of the Interior to require fish ladders at the dams as part of the relicensing process instead of catch and haul programs proposed by PacifiCorp.

Although they do not have the authority to require removing the dams, both the Pacific Fishery Management Council and the National Marine Fisheries Service have called for removing the dams.

“The dam removal alternative is a superior alternative from a fish passage water quality and habitat restoration standpoint,” said a statement from the NMFS.

Estimates to build the ladders and other fish habitat mitigations run between $300 and $470 million, with the cost of removing the dams between $150 and $250 million.

PacifiCorp says the cost of removing the dams and dealing with the estimated 20 to 25 million cubic yards of sediment behind the dams is unknown.

“Nobody knows what the cost of removing the dams will be,” said PacifiCorp spokesperson Dave Kvamme. “The sediment is a huge variable in the cost of moving forward. Dealing with sediment is extremely expensive. The Federal Energy Regulatory Commission roughed out the cost at between $1.5 and $4.5 billion. The other alternative would be to let it flush downstream. How would we ever get a permit to do that?”

Curtis Knight of California Trout said sediment is a large issue when removing a dam, but that there are cost effective methods for dealing with the problem. Knight noted that some dams have issues with sediment toxicity, but that the Klamath dams have been tested and cleared.

“If you take down a dam, sediment is the issue. The cost of manually removing it is cost prohibitive,” Knight said. “Preliminary studies on what to do with the sediment behind the dams is to let the river do the work. The permitting process will answer many of the questions. If it is decided to take the dams down, they won't be removed for 10 years.”

Knight said one scenario would be to take down the dams one by one until the final dam, Iron Gate, has the bulk of the sediment behind it and then do a slow draw down to lessen the effect on the river.

“At some point there will be a big event. The current thinking is the majority of the sediment would flush down the river in one high flow season,” Knight said. “The reintroduction of the fish would be coordinated with taking the dams down to reduce the impact on the fish.”

PacifiCorp says the benefits of hydroelectricity may outweigh the mitigation costs, but said they are still open to further negotiations.

In a press release, PacifiCorp states that it “does not own enough generating capacity to supply its customers' energy requirements. For this reason, the company highly values its dependable hydro resources. The Klamath Hydroelectric Project is the company's third largest hydro project. The company plans to continue operating the Klamath Project, but would not rule out other reasonable outcomes that may be achieved through the alternative settlement process underway in parallel with the FERC licensing proceeding.”

PacifiCorp president Bill Fehrman noted hydroelectric energy is “green” in the sense that it does not produce carbon. PacifiCorp says the dams produce 161 megawatts, enough electricity to power 70,000 homes. The company claims a coal fired plant would burn 350,000 tons of coal to produce an equivalent amount of power.

“These plants do not produce carbon dioxide or other emissions, so they have positive environmental attributes,” Fehrman said. “The fact that the Klamath project is an

emissions-free, renewable resource will make it more valuable to our customers in the future and reduce our overall carbon footprint."

Glenn Spain of the Pacific Coast Federation of Fishermen's Associations, whose members were dramatically affected by the fishing ban, says the amount of power from the dams represents a small portion of PacifiCorp's generating capabilities.

"The 161 megawatts is only 1.9 percent of PacifiCorp's total output," Spain said.

The PCFFA has long advocated taking down the dams.

"The dams disrupt water quality and block passage for one third of the salmon habitat," Spain said. "The reservoirs are breeding grounds for parasites that have become epidemic. The dams need to come down. It is one step that is doable. They are very small, obsolete and destroy the fishery."

Knight points out that alternative energy sources could replace the dam's electricity and the rated 161 megawatts is misleading.

"The power could be replaced with other forms of renewable energy such as wind or solar," Knight said. "The 161 megawatts is at peak. Hydroelectricity doesn't average peak output, it is much less."

Box Canyon Dam at Lake Siskiyou, for example, is rated at five megawatts, but generates at that capacity only three months out of the year with output dropping as low as 400 kilowatts or to zero during drought years.

Fehrman confirmed the company is still willing to consider removing the dams under certain circumstances.

"We are still willing to consider any sensible compromise that may come from the settlement process as long as it protects our customers' interests and respects the company's property rights, Fehrman said. "However, if that process does not work out, we'll focus our attention on implementing the agencies' prescriptions to help bring migrating salmon into the Upper Klamath Basin."